

Alexander and Lienert selected as ASM International Fellows

November 6, 2013



David Alexander and Thomas Lienert of Metallurgy (MST-6) are among ASM International's 2013 Class of Fellows, who are honored for their distinguished contributions to materials science and engineering. A total of nine ASM fellows have come from Los Alamos over the years, according to the society, which is commemorating its 100th anniversary.

Alexander achievements

The citation for Alexander reads: "For excellence in the understanding of deformation processing and effects of in-service conditions on microstructure/property relationships through novel testing techniques and innovative processing routes in a wide variety of structural materials."

Alexander has a doctorate in metallurgy from Carnegie-Mellon University and joined Los Alamos in 1998. He leads MST-6's Forming and Machining Team, which is responsible

for processing, fabricating, and machining materials and components for numerous customers at the Lab, in both weapons-related and non-weapons programs. Alexander was part of a team that won two LANL awards for the Nondestructive Laser Gas Sampling project, and a R&D 100 Award from *R&D Magazine* for Valveless Laser Processing. He won two NNSA Defense Programs Awards of Excellence for electro spark deposition development on the Nondestructive Laser Gas Sampling team and for deformation physics-based uranium component modeling on the PREDICT team. He holds two patents. Alexander chairs the Metallurgical and Materials Transactions Joint Commission, an advisory panel for one of the premier archival journals for metallurgical and materials research.

Lienert achievements

The citation for Lienert reads: "For sustained impact and pioneering advancements in welding metallurgy and welding process understanding."

Lienert, who holds a doctorate in Materials Science and Engineering from The Ohio State University, is a staff member in MST-6's Welding and Joining team, the largest precision welding group of its kind in the DOE weapons complex. He joined the team in 2002. Lienert played a key role in modernizing the laser system at Technical Area 55 with a new Yb-fiber laser welding system and was the driving force behind the development of the Valveless Laser Processing project, which won a 2012 R&D 100 Award from *R&D Magazine*. He was a recipient of a 2011 NNSA Defense Programs Award of Excellence and a 2011 LANL Distinguished Performance Award for his efforts on the Nondestructive Laser Gas Sampling project. Lienert was awarded the 2004 McKay-Helm Award for the most valuable paper relating to joining of steels and stainless steels and the 1999 Charles H. Jennings Memorial Award for the most valuable university research paper for publications in the *Welding Journal Research Supplement*. Lienert is a fellow of the American Welding Society, as well as a Directorat-Large and a member of its Board of Directors.

About ASM International

ASM is Everything Material, the society dedicated to serving the materials science and engineering profession. Through its network of 36,000 members worldwide, ASM provides authoritative information and knowledge on materials and processes, from the structural to the nanoscale. Recipients of one of the highest honors in the field of materials, ASM Fellows are technical and professional leaders who have been recognized by their colleagues and now serve as advisors to the society. Nominated by their peers, ASM fellows must be members of the society for at least five years and receive final approval from the Board of Trustees.

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